

Request for Continued Examination (RCE) under 37 CFR § 1.114 and the following Amendment. A petition to revive an unintentionally abandoned application, a petition for a three (3) months extension of time from June 15, 2000 to September 15, 2000, a Sequence Listing, and two diskettes in computer readable form containing the Sequence Listing are enclosed.

IN THE CLAIMS:

13. (Twice Amended) A method for determining the presence or amount of an analyte in a test sample, comprising:

forming a mixture of (1) a chimeric enzyme comprising an enzyme and a mimetope, said mimetope including at least one amino acid, said chimeric enzyme having a sequence of said mimetope inserted in said enzyme or replacing at least one amino acid of said enzyme with the proviso that the activity of the chimeric enzyme is modulated upon binding of a binding molecule to the mimetope, (2) a test sample containing said analyte of interest, (3) a binding molecule which binds to a mimetope of the chimeric enzyme and modulates the activity of the enzyme, and (4) a substrate upon which the chimeric enzyme catalytically acts; and

detecting the amount of catalysis of the substrate and thereby determining the presence or absence of said analyte of interest.

14. A method of claim 13, wherein the analyte competes with the chimeric enzyme for binding to the binding molecule.

15. A method of claim 13, wherein the analyte is prostate-specific antigen.

16. A method of claim 13, wherein the test sample is serum.

17. A method of claim 13, wherein the test sample contains the analyte.

18. A method of claim 13, wherein the binding molecule is said analyte.
19. A method of claim 13, wherein the binding molecule is an antibody.
20. (Twice Amended) A method for determining the presence or amount of an analyte in a test sample, comprising:

c2 forming a mixture of (1) a chimeric enzyme comprising an enzyme and a mimetope, said mimetope including at least one amino acid, wherein said chimeric enzyme having a sequence of said mimetope inserted in said enzyme or replacing at least one amino acid of enzyme with the proviso that the activity of the chimeric enzyme is modulated upon binding of a binding molecule to the mimetope, (2) test sample containing said analyte of interest, and (3) a substrate upon which the chimeric enzyme catalytically acts; and

detecting the amount of catalysis of the substrate and thereby determining the presence or absence of said analyte of interest.

21. A method of claim 20, wherein the analyte and substrate contact the enzyme simultaneously.
22. A method of claim 20, wherein the analyte is contacted with the chimeric enzyme prior to contacting with the test sample and the substrate.
23. A method of claim 20, wherein the analyte is an antibody.
24. A method of claim 20, wherein the starting enzyme is β -lactamase.
25. A method of claim 20, wherein the test sample contains the analyte.

c3 26. (New) The method of claim 13, wherein the mimetope comprises any one of a sequence identified from SEQ ID NOs. 1-78.

27. (New) The method of claim 20, wherein the mimetope comprises any one of a sequence identified from SEQ ID NOs. 1-78.